REMARKS/ARGUMENTS

Claims 1 and 3-20 are pending in the instant application. In the non-final Office Action dated June 15, 2005, the Examiner has rejected claims 1 and 3-16 under 35 USC 103(a) as obvious over Wan (US 6,385,460) in view of Garceran (US 6,522,888), and has further rejected claims 17-20 as obvious over Wan in view of "EPGRS Link Quality Control Measurements and Filtering" (EPGRS reference).

Claim 1 is amended to replace the steps "deriving" and "transmitting" with the step "wirelessly receiving", so that the claim 1 reads only on actions performed in the mobile equipment. This is also seen to make the below distinctions over the art more clear. Dependent claims 3-10 are amended to draw proper antecedent basis from amended claim 1. Claims 17 and 19 are amended in form to recite with separate indentations the various distinct elements of the network and the mobile equipment.

In the Applicant interpretation of the Office Action pinpoint citations and reasoning, it appears that the Examiner considers the mobile equipment recited in the claims as components of the network also recited in those claims. All of the claim changes made herein distinguish the network from mobile equipment so that the latter is NOT an element of the former. While the mobile equipment may operate within a wireless network as at page 5, lines 5-6 of the written description, Figure 3 and the related description clearly show that the mobile equipment 10 in communication with the wireless network 12 is not within that network 12.

Claim 1 as amended recites that the mobile equipment wirelessly receive an indication of ME speed through a wireless network. To the now-canceled elements "deriving" and "transmitting", the Office Action cites to Wan at col. 2 lines 20-65; col. 5 lines 5-15; and col. 12 lines 12-65. However, each of these, and throughout Wan, it is seen as the mobile unit that calculates its own speed, and in no instance is its speed or some indication of its speed transmitted from a base station to the mobile unit.

Specifically, the cited portions of Wan at col. 2 describe five embodiments. At col. 2 lines 28-29, "the invention determines the rate of change in the measured signal strength of the mobile unit." The signal strength of the mobile unit is measured in the receiving mobile

unit, so the mobile unit of this Wan embodiment does not wirelessly receive a measure of its own signal strength or speed but calculates speed from changing signal strength of received signals. At col. 2 lines 34-39, the mobile unit detects signals transmitted by base stations, and it is explicit that the mobile unit uses these received signals to measure signal strength from which it calculates its own speed. At col. 2 lines 45-50 Wan discloses that the mobile unit measures signal quality of signals received from a base station, and uses the measured signal quality to calculate its speed. At col. 2 lines 55-57 Wan discloses a speed sensor that determines speed based on the change in signal strength received at the mobile unit. To calculate speed from signals received at the mobile unit would require that the speed sensor itself is located within the mobile unit so the mobile unit again calculates its own speed. At col. 2 lines 62-65 the speed of a Wan receiving unit is determined, but no further detail is given. Each of these are consistent with one result: the mobile unit determines its own speed internally. In contradistinction, claim 1 recites that the mobile unit wirelessly receive an indication of its speed.

Further citations to Wan describe, at col. 5, lines 5-15, processing performed in the mobile unit of Figure 3 (see col. 3 lines 20-21). This is consistent with the above-described embodiments detailed at Wan col. 2. Wan at col. 12 lines 12-65 describes actions performed *by a mobile unit*, as illustrated in Figure 7 (see col. 3 lines 30-32 and the text in Figure 7). Figure 7 and the associated text, especially at col. 12, lines 35-38, explicitly recites that the mobile unit calculates its own speed from a change in signal levels that it receives.

Every embodiment of Wan is seen to teach that the mobile unit calculates its own speed, and nowhere is Wan seen to teach or suggest that this speed is wirelessly received at the mobile unit (as recited in claim 1 and similarly in other independent claims). The purpose for this speed calculation in Wan is to inform the network of base stations that provide useable signals to assist in a handover. See Wan, abstract. Assuming arguendo that Wan may be modified so that the mobile unit, after calculating its own speed internally, transmits that calculated speed to the network, the independent claims remain novel and non-obvious because there is no need in Wan for the mobile unit to wirelessly receive its own speed indication, which the mobile unit calculated originally. Such a modification would be repetitive and wasteful of bandwidth. Assuming arguendo that Wan may be modified so

that the network calculates the mobile unit's speed, two issues arise. First, there appears no purpose for the network to then transmit the speed that it calculates to the mobile unit, because the network in Wan uses the mobile unit's speed for handover purposes, which are controlled by the network. Second, due to variations in terrain, interfering signals, channel fade and the like, the signal strength indications received by the Wan mobile unit, from which it calculates its own speed, are seen as far superior indicators of candidate base stations for handover purposes than mere geographic proximity that a speed indication measured by the network would yield. Strength of signals received from the mobile unit at the active base station are not indicative of signal strengths received at the mobile unit from a different candidate base station.

More fundamentally, the purpose of Wan is to enable background scans for alternate radiotelephone systems, specifically to avoid using dual receivers when a GAIT mobile station is camped on a GSM system. See col. 1 line 49 to col. 2 line 15. To modify Wan so that the network rather than the mobile unit determines the mobile unit's speed would appear to eliminate the very problem Wan seeks to solve because no background scans would be needed: the network would determine mobile unit speed and resolve candidate base stations for handovers. Such a hypothetical modification fundamentally changes the Wan principle of operation, and nonetheless fails to yield "wirelessly receiving at a mobile equipment ME an indication of the ME's speed through a wireless network" as in claim 1 and similarly in the remaining independent claims.

Garceran is cited for teachings related to reporting link quality measurement to the network, and is not seen to be, nor asserted as being, relevant to mobile equipment speed calculations. Thus the combination of Wan and Garceran are not seen to teach or disclose wirelessly receiving at a mobile equipment ME an indication of the ME's speed through a wireless network as recited in claim 1.

Claims 17 and 19 are amended as to form so that the different elements of the network and the mobile equipment are clearly set off by indentations. Claims 17 and 19 recite as elements of the network: " a unit for deriving an indication of a speed of a ME within a serving cell" and "a transmitter for transmitting the indication of the ME speed to the ME". For the above reasons detailed with respect to claim 1, these elements in the network, apart

from the mobile equipment, are seen to distinguish over Wan and obvious modifications thereto. The EPGRS reference is cited only for its teachings regarding transmitting link quality measurements from the mobile equipment in a PSI 13 message. No combination of Wan and the EPGRS reference is seen to teach or suggest the above-recited elements of claims 17 and 19. The Applicant notes that claims 17 and 19 recite the network transmitter is for transmitting the indication of the ME speed to the ME, not an average of all ME speeds in the cell.

Claim 20 recites method steps for both the network and the mobile equipment. Claim 20 recites that the network determines an indication of signal quality experienced by individual ones of a plurality of mobile equipments MEs, the network transmits the determined indications to individual ones of the MEs, and in a particular one of the MEs, receiving the transmitted indication and using it to set a filter length.

Wan is directed to a power management system for a mobile unit operating in a network cell (abstract). The abstract further recites that the mobile unit may change scanning rate for neighboring cells based on its own measurement of signal strength (or rate of signal strength change) for signals received from the base station. Further detail is provided at col. 7, lines 18-26, cited in the Office Action, and at Fig. 6. In each instance and as seen throughout Wan, the mobile unit measures signals strength of signals received from the base station, and can use those signal strength measurements to estimate its own speed through a cell of the network.

It is not obvious to modify Wan so that the speed indication is derived/determined in the network (as in claims 17 and 19-20), or that the speed indication is wirelessly received at the mobile equipment (claims 1, 17, 19)/transmitted to the mobile equipment (claim 20). Though the Office Action does not state or imply that such a modification would be obvious, the Applicant preemptively addresses below such a hypothetical modification.

The purpose of Wan is twofold: 1) power management in the mobile unit to control the frequency by which the mobile unit scans neighboring base stations; and 2) to inform the network which neighboring base stations provide useable signals to assist in a handover (abstract). The Applicant asserts that to modify Wan so that the network computes the

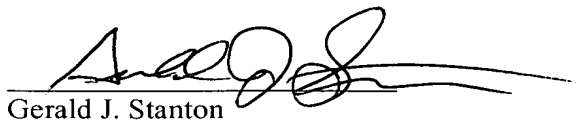
speed of individual mobile units is both contrary to the explicit disclosure of Wan, undermines its principle of operation, and is seen as a detriment rather than an improvement.

Two problems are seen with modifying Wan so that the network calculates the ME's speed. First, related to handovers, the uplink signal strength received at the active base station (from which the mobile unit's speed would be measured if modified as noted above) is not reflective of the signal quality experienced by the mobile unit from another standby base station, and would be of slight use for handover purposes. It may be useful for plotting the mobile unit's location on a map, but this is much less relevant to handovers than the quality of signals received from a neighboring base station that Wan currently uses. Said another way, the signal quality experienced at the active base station from the mobile unit is a poor indicator of signal quality received at the mobile unit from a neighboring base station that may be used in a handover. Determining speed to map the mobile unit's position gives position information but not the more appropriate signal quality information Wan discloses, which is directly relevant for handover purposes. Second, it is well known that the uplink (mobile unit to base station) and downlink (base station to mobile unit) signals experience different fading characteristics. Whether the purpose is to determine which neighboring base stations are providing a useable signal for the Wan mobile unit, or to set a period for monitoring neighboring base stations in standby mode, the purported modification to Wan as noted above would necessarily rely on the erroneous assumption that uplink and downlink are identical quality at all times. The more accurate measure would conserve more power, and the more accurate measure of signal quality on the downlink is measured at the mobile unit. Further, power would not be conserved where the mobile unit reported signal quality and was informed of a different scan period for the mobile unit's standby mode, as the mobile unit would consume more power in the extra transmissions reporting signal quality to the network than it would save by marginally increasing the standby scan interval. The hypothetical modification to Wan is therefore not within ordinary skill in the art and would undermine either Wan's effectiveness or its principle of operation of conserving power.

For at least the above reasons, the Applicant believes the claims are patentable and the rejections are overcome. Applicant respectfully requests the Examiner to pass all claims to

allowance, and invites the Examiner to discuss any remaining concerns, if there be any, with the undersigned representative via telephone at his discretion.

Respectfully submitted:



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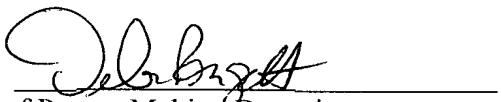

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